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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,945	09/12/2000	Franciscus L.A.J. Kamperman	PHN 17,285	2098
7590 03/27/2006			EXAMINER	
Michael E. Belk			KIM, JUNG W	
Philips Intellect	ual Property & Standards			
PO Box 3001			ART UNIT	PAPER NUMBER
Briarcliff Manor, NY 10510			2132	

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/623,945	KAMPERMAN ET AL.
Office Action Summary	Examiner	Art Unit
	Jung W. Kim	2132
The MAILING DATE of this communication app		with the correspondence address
eriod for Reply	_	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	TE OF THIS COMMUN 6(a). In no event, however, may ill apply and will expire SIX (6) Mi cause the application to become	IICATION. a reply be timely filed ONTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 18 Fe	e <u>bruary 2006</u> .	
	action is non-final.	
3) Since this application is in condition for allowar	nce except for formal m	atters, prosecution as to the merits is
closed in accordance with the practice under E	x parte Quayle, 1935 C	.D. 11, 453 O.G. 213.
Disposition of Claims		
4)⊠ Claim(s) <u>1-4 and 10-29</u> is/are pending in the a	oplication.	
4a) Of the above claim(s) is/are withdraw	vn from consideration.	
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-4 and 10-29</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/o	r election requirement.	
Application Papers		
9) The specification is objected to by the Examine	r ·	
10) The drawing(s) filed on is/are: a) acc	ented or b) Cobiected	to by the Examiner.
Applicant may not request that any objection to the	drawing(s) he held in abe	vance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correct	tion is required if the draw	ng(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Ex	caminer. Note the attac	ned Office Action or form PTO-152.
	tarrinor, rote are areas	
Priority under 35 U.S.C. § 119		
12)⊠ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C	C. § 119(a)-(d) or (f).
a)⊠ All b)□ Some * c)□ None of:		
1. Certified copies of the priority document	s have been received.	A callantian Me
2. Certified copies of the priority document	s have been received in	Application No
3. Copies of the certified copies of the prior	inty documents have be	en received in this National Stage
application from the International Burea		not received
* See the attached detailed Office action for a list	or the certified copies i	iot receiveu.
Attachment(s)		
1) Notice of References Cited (PTO-892)		ew Summary (PTO-413) No(s)/Mail Date
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ul>	5) Notice	of Informal Patent Application (PTO-152)
3) Information Disclosure Statement(s) (P10-1449 or P10/56/06	6) 🔲 Other:	·

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#### **DETAILED ACTION**

- 1. This Office action is in response to the RCE filed on February 18, 2006.
- 2. Claims 1-4 and 10-29 are pending.
- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 18, 2006 has been entered.

# Response to Arguments

- 5. Applicant's arguments with respect to the prior art rejections are moot in view of the new prior art rejections as outlined below.
- 6. Applicant's arguments with respect to the 101 rejections to claims 10-13 have been considered but are not persuasive. In regard to the material of claims 11-12, Applicant alleges that "there is clearly a data structure defined here that imparts

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functionality when employed as a computer component; wherein a data structure is a physical or logical relationship among data elements, designed to support specific data manipulations." (Remarks, pg. 10) However, the "coded data" of claims 1 and 3 are merely compressed data embedded within it supplemental data. No functional interrelationship is established. In fact, compressed data having embedded supplemental data is a mere arrangement and is characteristic of non-functional descriptive material such as music. Furthermore, assuming arguendo that the coded data is functional descriptive material, a signal does not fall within one of the four statutory classes of section 101: it is not a process because it does not have a series of steps; it has no physical structure, does not itself perform any useful, concrete and tangible result and, thus does not fit within the definition of a machine; a signal is a form of energy so it does not fall within the definition of manufacture as defined by the Supreme Court: the production of articles for use from raw or prepared materials by giving to these materials new forms, qualities, properties, or combinations, whether by hand-labor or by machinery. See the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, Annex IV "Computer-related nonstatutory Subject Matter", (c) Electro-magnetic signals. As of the date of this action, the Interim Guidelines can be found at:

http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm.

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#### Claim Rejections - 35 USC § 101

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7. Claims 10-13 are rejected under 35 U.S.C. 101 because claims 10 and 12 are drawn to signals per se, not embodied on a computer-readable medium nor on an electromagnetic wave. See MPEP 2106 IV B. 1(a) and (c); *In re Warmerdam*, 31 USPQ2d 1754, 1760 (Fed. Cir. 1994); and *O'Reilly v. Morse*, 56 U.S. 62, 112-114 (1853). In addition, claims 10-13 are drawn to encoded data which is nonfunctional descriptive material, not a process, machine, manufacture, nor composition of matter. See MPEP 2106 IV B. 1(b) and *In re Warmerdam*, 31 USPQ2d 1754, 1760 (Fed. Cir. 1994).

## Claim Rejections - 35 USC § 112

- 8. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 9. Claims 1, 2, 10, 11, 14, 15, 18, 20, 21, 22 and 25-29 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: partitioning the data into frames, determining a set of parameters for each frame; reducing the data rate of the input signal by applying an algorithm which is controlled by the parameter set whereby encoded data includes the set of parameters or at least data which can be used to derive the parameter set and the data reduced signal. These are essential steps as they define the interrelationship of the parameter and the lossless coded signal. In claim 1, without these steps, it is not clear what is

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being altered since the claim does not define the relationship of the parameter with the lossless coded signal.

### Claim Rejections - 35 USC § 102

10. Claims 1, 2, 10, 11, 14, 15 and 25-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Barbir USPN 6,122,379. (hereinafter Barbir)

As per claim 1, Barbir discloses a method of encoding data, comprising embedding supplemental data into a lossless coded signal by inserting the supplemental data into the data using at least one parameter which is altered in order to embed the supplemental data; and deriving the supplemental data from other data. (col. 7:22-8:53; 9:5-35; arithmetic coder is a lossless encoder; the supplemental data is derived from the RNG; the "induced randomness" is the supplemental data (8:8:5-6); the coding probabilities are the altered parameters)

As per claim 2, Barbir discloses a method of extracting supplemental data of encoded data as defined in claim 1. (col. 8:7-8; 9:37-67)

As per claims 10 and 11, Barbir discloses a data carrier comprising a recorded signal comprising the encoded data of claim 1. (fig. 3, reference no. 170)

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As per claims 14 and 15, Barbir discloses an arrangement for performing the method of claims 1 and 2. (fig. 3 and 4)

As per claim 25, Barbir discloses lossless encoding is used to encode the supplemental data. (no data is lost in the randomizing steps)

As per claim 26, Barbir discloses the supplemental data is encoded bit by bit. (fig. 6, reference nos. 300 and 305)

As per claim 27, Barbir discloses before the embedding, partitioning of the data into frames and determining a set of parameters for each frame, wherein the set of frames can be altered to embed the supplemental data. (col. 8:63-65; fig. 8)

As per claim 28, Barbir discloses the encoded data is used to derive the set of parameters. (col. 8:63-65)

As per claim 29, Barbir discloses the parameters is altered to a dedicated value in response to the supplemental data to be encoded. (fig. 6; reference nos. 335, 340, 345, 350, 355 and 360)

Claims 3, 4, 12, 13, 16, 17, 19, 23 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Bloom USPN 6,332,194. (hereinafter Bloom)

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As per claim 3, Bloom discloses a method of encoding input data, comprising the steps of:

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- a. partitioning the data into frames; determining a set of parameters for each frame; reducing the data rate of the input signal by applying an algorithm which is controlled by the parameter set whereby encoded data includes the set of parameters or at least data which can be used to derive the parameter set and the data rate-reduced signal (col. 6:12-29); and
- b. embedding supplemental data into encoded data, the parameter set is affected by the supplemental data. (6:31-61; fig. 3, reference nos 306, 308, and 310 and related text)

As per claim 4, Bloom further discloses a method of extracting information which is embedded in the parameter set of an encoded signal as defined in claim 3. (col. 4:22-24)

As per claims 12 and 13, Bloom discloses a data carrier comprising a recorded signal comprising the encoded data of claim 3. (col. 4:6-28)

As per claims 16 and 17, Bloom discloses an arrangement for performing the methods of claims 3 and 4. (col. 4:6-28)

As per claims 19, 23 and 24, Bloom discloses the arrangement for performing the method of claims 3 and 4 is a disc player for audio and audio-visual media. (4:6-28)

## Claim Rejections - 35 USC § 103

Claims 18 and 20-22 are rejected under 35 USC 103(a) as being unpatentable over Barbir in view of by Bloom.

As per claims 18 and 20-22, the rejections of claims 1, 2, 14 and 15 are incorporated herein. (supra) Barbir does not expressly disclose the arrangement is a playback machine, specifically a disc player for audio and audio-visual media. Bloom discloses a method for watermark insertion into a compressed data wherein the arrangements to embed the watermark and the arrangement to extract the watermark are a disc player for audio and audio-visual media. (4:6-28) Watermark insertion and detection by a disc player for audio-visual media ensures restricted use of the protected data. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made for the arrangements of the methods of claims 1 and 2 to be a playback machine, specifically a disc player for audio and audio-visual media. One would be motivated to incorporate the arrangements into a disc player to ensure restricted use of the protected audio-visual data. (Bloom, ibid) The aforementioned cover the limitations of claims 18 and 20-22.

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#### Communications Inquiry

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W. Kim whose telephone number is 571-272-3804. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 21, 2006

Jung W Kim Examiner Art Unit 2132

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